

Human PLSCR1

```

1 cgagcgccag cgcgggaacc gggaaaagga aaccgtgttg tgtacgtaag attcaggaaa
61 cgaaaccagg agccgcgggt gttggcgcaa aggttactcc cagacccttt tccggctgac
121 ttctgagaag gttgcgcagc agctgtgccc gacagtctag aggcgcagaa gaggaagcca
181 tcgcctggcc cgggctctct ggacctgtgc tcgctcgga gcggaaacag cggcagccag
241 agaactgttt taatcatgga caaacaaaac tcacagatga atgcttctca cccggaaaca
301 aacttgccag ttgggtatcc tcctcagtat ccaccgacag cattccaagg acctccagga
361 tatagtggct accctgggccc ccaggtcagc taccaccccc caccagccgg ccattcaggt
421 cctggccccg ctggctttcc tgtcccaaat cagccagtggt ataatcagcc agtatataat
481 cagccagttg gagctgcagg ggtaccatgg atgccagcgc cacagcctcc attaaactgt
541 ccacctggat tagaatattt aagtcagata gatcagatac tgattcatca gcaaattgaa
601 cttctggaag ttttaacagg ttttgaaact aataacaaat atgaaattaa gaacagcttt
661 ggacagaggg tttactttgc agcgggaagat actgattgct gtacccgaaa ttgctgtggg
721 ccatctagac cttttacctt gaggattatt gataatatgg gtcaagaagt cataactctg
781 gagagaccac taagatgtag cagctgttgt tgtccctgct gccttcagga gatagaaatc
841 caagctcctc ctgggtgtacc aataggttat gttattcaga cttggcacc atgtctacca
901 aagtttacaa ttcaaaatga gaaaagagag gatgtactaa aaataagtg tccatgtgtt
961 gtgtgcagct gttgtggaga tgttgatttt gagattaaat ctcttgatga acagtgtgtg
1021 gttggcaaaa tttccaagca ctggactgga attttgagag aggcatttac agacgctgat
1081 aactttggaa tccagttccc tttagacctt gatgttaaaa tgaaagctgt aatgattggg
1141 gcctgtttcc tcattgactt catgtttttt gaaagcactg gcagccagga acaaaaatca
1201 ggagtgtggg agtggattag tgaaagtctc ctcaggaaat ctgaagtctg tatattgatt
1261 gagactatct aaactcatac ctgtatgaat taagctgtaa ggcctgtagc tctgggtgta
1321 tacttttgct tttcaaatta tagtttatct tctgtataac tgatttataa aggtttttgt
1381 acatttttta atactcattg tcaatttgag aaaaaggaca tatgagtttt tgcatttatt
1441 aatgaaactt cctttgaaaa actgctttga attatgatct ctgattcatt gtccatttta
1501 ctaccaataa ttaactaagg ccttattaat ttttatataa attatatctt gtccattata
1561 atctagttac aatttatttc atgcataaga gctaattgta ttttgcaaat gccatatatt
1621 caaaaaagct caaagataat tttctttact attatgttca aataatattc aatatgcata
1681 ttatctttta aaagttaaat gtttttttaa tcttcaagaa atcatgctac acttaacttc
1741 tctagaagc taatctatac cataatattt tcatattcac aagatattaa attaccaatt

1801 ttcaaattat tgtagtaaa gaacaaaatg attctctccc aaagaaagac acattttaaa
1861 tactccttca ctctaaaact ctggtattat aacttttgaa agttaatatt tctacatgaa
1921 atgttttagct cttacactct atccttccca gaaaatggta attgagatta ctcagatatt
1981 aattaaatac aatatcatat atatatccac agagtataaa ctaaataat gatctattag
2041 attcaaatat ttgaaataaa aacttgattt ttttgt

```

Predicted open reading frame:

```

MDKQNSQMNASHPETNLPVGYPPQYPPTAFQGP PGYSGYPGPQVSYP PPPAGHSGPGPAG
FPVPNQPVYNQPVYNQPVGAAGVPWMPAPQPPLNCP PGLEYLSQIDQILIHQQIELLEVL
TGFETNNKYEIKNSFGQRVYFAAEDTDCCTRNC CGPSRPFTLRIIDNMGQEVITLERPLR
CSSCCPCCLQEIEIQAPPGVPIGYVIQTWHPCLPKFTIQNEKREDVLKISGPCVVCSCC
GDVDFEIKSLDEQCVVGKISKHWTGILREAF TDADNFGIQFPLDLVKMKAVMIGACFLI
DFMFFESTGSQEQKSGVW

```

FIGURE 1

Human PLSCR2

```

1 ggccgaatgg agaatgaagc cttttcaaat tcacctccca gtgaaccacc ctcaaaatag
61 aagtgaatgt gaaaccacag atatttcatt aaaacatata tgaagataaa aacatacctc
121 aagcttcaca gatataggac ttctgagctg agaggacctc ccggacatat tgtctaccct
181 aagcaccagg ctggacacac tgggaaacag gctgaccacc tgggctccca ggccttctac
241 ccaggacgct agcatgacta cctagtccca cctgctggca cagctggcat tctgttcaa
301 aatcagccag gtagacctga aggggtacca tggatgccag caccaccacc accattaaac
361 tgtccgccag gattggaata cttaagtcag atagatatga tactaattca tcagcaaatt
421 gaacttctgg aagttctatt cagttttgaa agtagtaaca tgtatgaaat caagaacagc
481 tttgggcaga ggatttattt tgcagcagaa gatactaatt tctgtatccg aaattgctgt
541 gggcgggtcta gaccttttac cttgaggatt actgataatg tgggtcgaga agtcataact
601 ctggaaagac cactaagatg taactgttgt tgttgcctct gctgccttca ggagatagaa
661 atccaagctc ctctggtgt accagtaggt tatgttactc agacctggca cccatgtcta
721 acaaagttaa caattaaaaa tcagaaaaga gaggatgtac taaaaattag tgggtccatgt
781 atcgtgtgca gctgtattgc ggggtgtgat tttgagatta catctcttga tgaacaaatt
841 gtggttggca ggatttctaa gcactggtct gggtttttaa gagaggcatt tactgatgct
901 gacaactttg gaatccaatt ccctagagac cttgatgtta aaatgaaagc cgtgatgatt
961 ggtgcctggt tcttcattga ctacatgttt tttgaaagaa ctaggtaatg actggaatgt
1021 cagagtgtgg gagtggatta atgattccgg atctttggct aggcaaaatg aaactataac
1081 tgatctaaac ggttccttcc ttcttctact gtgcaaggaa gatgtaagga aaaactcgca
1141 cactatctgt ggaactcatt taaattcaaa tcctagataa acatttcgca ttgaatattt
1201 acatggagaa aaatcatcaa acatcaacaa ttatcaagtt aattaataaa aatactaggt
1261 attgc

```

Predicted open reading frame:

```

MPAPPPPLNCPPGLEYLSQLDMILIHQIELLEVLFSFESSNMYEIKNSFGQRIYFAAED
TNFCIRNCCGRSRPFTLRITDNVGREVITLERPLRCNCCCPCLQEIEIQAPPGVPVGY
VTQTWHPCLTKFTIKNQKREDVLKISGPCIVCSCIAGVDFEITSLDEQIVVGRISKHWSG
FLREAFTDADNFGIQFPRDLVKMKAVMIGACFLIDYMFETER

```

FIGURE 2

Human PLSCR3

```

1  cggggccggg  gtccgagctc  gggcccgcct  ccgcctccgc  cagctcctgt  gagctgccga
61  gtgctaggca  cccgggctct  tctgggggct  ccagaactaa  gccaccaga  caccatcatc
121  tcgaaaaccc  cagcccttct  cccatggcag  gctacttgcc  ccccaaaggc  tacgcccctt
181  cgccccacc  tccctaccct  gtcaccctg  ggtacccgga  gccggcgcta  catcctgggc
241  ccgggcaggc  gccagtgcc  gccaggtag  ctgccccagc  tcccggcttc  gccctcttcc
301  cctcgctgg  ccccggtggc  ttgggggtctg  ctgccccctt  cttgccactg  ccaggggtgc
361  cttctggcct  cgaattcctg  gtgcagattg  atcagatttt  gattcaccag  aaggctgagc
421  gaggtgaaac  gttcctaggc  tgggagacct  gtaatcggtg  tgaactgcgc  tctggggccg
481  ggcagcccct  gggtcaggcg  gccgaggaga  gcaactgctg  cgcccgtctg  tgctgtggcg
541  cccgcgggcc  gctgcgtgtc  cgcttgccg  accccgggga  ccgtgagggtg  ctgcgtttgc
601  tccgcccgt  gcaactgtgg  tgcagctgct  gccctgtgg  cctccaggag  atggaagtac
661  aggtccacc  aggcaccacc  attggccacg  tgctacagac  ctggcatccc  ttctcccca
721  agttctccat  ccaggatgcc  gatcgccaga  cagtcttgcg  agtgggtggg  cctgctgga
781  cctgtggctg  tggcacagac  accaactttg  aggtgaagac  tcgggatgaa  tcccgcagtg
841  tgggccgcat  cagcaagcag  tggggggggc  tgggtccgaga  agccctcaca  gatgcagatg
901  actttggcct  acagttcccg  ctggacctgg  atgtgagggt  gaaggctgtg  ctgctgggag
961  ccacattcct  cattgactac  atgttctttg  agaagcgagg  aggcgctggg  cctctgcca
1021  tcaccagtta  gaggccacca  tgggtgtgag  agaccatcac  ctgaccaga  actccagatg
1081  gtcacctgcc  ctggccctc  ctctgggcag  cccctttcct  ccatgtacac  tgcaggggac
1141  agaagggggg  ccccatccct  accctactcc  ctggccgcct  gccctgtgg  ttcccaagga
1201  ggggtatgta  tgagagccgc  tctcctgcta  cctcccacca  ctgtcccagc  agtccctcgg
1261  cacacaggca  tatcagcttt  cacactttcc  ccatgcactc  tctcccacc  ccttccaggg
1321  cctctgctcc  aaaggaggcc  tctggaacct  aggactctgg  ggttttaca  gagggctggg
1381  gtgtggaagg  gcaagctgca  ccaaagacgg  tggatatagc  caccgcccc  ccgcgctgc
1441  ctagcatctg  cttggccaat  tagttcagcc  tcagaccatg  gcactttgag  ggggtctcta
1501  cctccccatc  aacagctgca  gggggacccc  agtgccaact  tctctccca  ctagggccct
1561  gccttcagct  ggtgcttgct  gcgattcctg  tgccttatgt  aactgcctt  ccttcccttg
1621  ccctagga  aaggctgcat  ctttatatgt  tacattcata  taaactttgt  aactttttg

```

Predicted open reading frame:

```

MAGYLPPKGYAPSPPPYPVTPGYPEPALHPGPGQAPVPAQVPAPAPGFALFPSGPGPVAL
GSAAPFLPLPGVPSGLEFLVQIDQILIHQKAERVETFLGWETCNRYELRSGAGQPLGQAA
EESNCCARLCCGARRPLRVRLADPGDREVLRLRLHCGSCCPCGLQEMEVQAPPGTTI
GHVLQTHWFLPKFSIQDADRTVLRVVGPCWTCGCGTDTNFEVKTRDESRSVGRISKQW
GGLVREALTDADDFGLQFPLDLDRVKAVLLGATFLIDYMFEEKRGAGPSAITS

```

FIGURE 3

Human PLSCR4

```

1  gtttataact  tgaaaaatcc  tctccgtctc  ccttccctgc  ctcccttctc  ttccttttcc
61  tctgccagta  caactagacc  cggcgctctg  cgcccccggt  gccagcatt  ctgcggggca
121  ggcggattaa  ttggaattct  tcaaatgtc  aggtgtggta  cccacagccc  ctgaacagcc
181  tgcaggtgaa  atggaaaatc  aaacaaaacc  accagatcca  aggcctgatg  ctccctctga
241  atacagttct  ctttttttac  caggaccccc  tggaaacagct  gtccctccac  ctactggcta
301  cccaggagge  ttgcctatgg  gatactacag  tccacagcaa  cccagtacct  tccctttgta
361  ccagccagtt  ggtggtatcc  atcctgtccg  gtatcagcct  ggcaaatac  ctatgccaaa
421  tcagtctggt  ccaataacat  ggatgccagg  gccaaactct  atggcaaact  gccctctggt
481  tctggaatac  ttagttcagt  tggacaacat  acatgttctt  cagcattttg  agcctctgga
541  aatgatgaca  tgttttgaaa  ctaataatag  atatgatatt  aaaaacaact  cagaccagat
601  ggtttacggt  gtaaccgaag  acacagatga  ctttaccagg  aatgcctatc  ggacactaag
661  gcccttcgtc  ctccgggtca  ctgattgtat  gggccgagaa  atcatgacaa  tgcagagacc
721  cttcagatgc  acctgctggt  gcttctgttg  cccctctgcc  agacaagagc  tggaggtgca
781  gtgtcctcct  ggtgtcacca  ttggctttgt  tgcggaacat  tggaaacctgt  gcagggcggt
841  gtacagcctc  caaaatgaga  agaaagaaaa  tgtgatgaga  gttcgtgggc  catgctcaac
901  ctatggctgt  ggttcagatt  ctgtttttga  ggtcaaatcc  cttgatggca  tatccaacat
961  cggcagttat  atccggaagt  ggaatggttt  gttatcagca  atggcagatg  ctgaccattt
1021  tgacattcac  ttcccactag  acctggatgt  gaagatgaaa  gccatgattt  ttggagcttg
1081  cttcctcatt  gacttcatgt  attttgaaag  atctccacca  caacgttcaa  gatagagaga
1141  cacagcaagc  catcaactat  ggttaatttt  gaaaaatgga  aaagttggat  tgggcttaca
1201  gtcagcactc  agttatttgc  aagtgtattt  ctttgctttg  tagagtattt  ttattgggtg
1261  ttaactttga  cagctgagag  tgggcttgca  agaacacaat  ctaaaagtgt  gtttcaattg
1321  agtatctctc  tagtagaata  ggagttcatc  ctgaaaagct  gtgactcatt  aaccagtaa
1381  acatatacaa  agtaagctta  aaacactata  aacatgagat  aagggaaaat  gaatccagag
1441  ttctcatatt  aataggtagt  gaaacaataa  ggctttttag  agcagacttt  gttggcataa
1501  aataacctgg  cttctatccc  taaccttttc  ctacctttcc  tctccgtcaa  catgtcctca
1561  tactgaagac  aaacttggtt  caatgatagt  cttcattttt  aaaaacaaaa  aggcaggcag
1621  acagaaataa  tgatgttttc  ttgcactaag  aaggtactac  ttgtacacat  atatcaaaac
1681  ctcatctctg  aaagtttttg  aaggtttcaa  tgggaaattt  gattttatta  caaaataaaa
1741  cattttttta  tgtaaagtt  tatatatccc  atgcttggtt  tctcattcac  tggcatggat
1801  gatcaggagc  tgctatata  tgaaggcaga  atcagactat  caggaaagga  gctggccagg
1861  gccacagcca  gtcaagatct  ctgagcaact  tagagacatt  ggtgtcatta  tatgaagctt
1921  gcatttaata  catttataca  taatacattt  gtacatttaa  ttcataacgt  ctcttggcca
1981  cagatgcctt  atatataaaa  taagttgcca  gatctctaag  attgcctagt  acacctttgt
2041  atctcatttg  atgtgatacc  cagaagagat  cattgttttt  tgtttttgtt  tttgtttttt
2101  tcaagaagat  ccttcgtgat  cccatgtctg  ttctcatggt  aagaactgga  gttatgtttt
2161  taaatttgaa  aatatgacat  tttatgtagc  actatataaa  aagtgaagac  gacaaattcc
2221  accgctgctt  aatactgctt  tgcttctttt  tattgacatg  atagatacat  atgtatctac
2281  acagagtaat  aataataaaa  cacagtaaac  attctatttc  tctatggtct  acagcatgcc
2341  agtaaataat  atgtaggacc  aataataaat  tatcaattac  acatttttgt  gttaactaat
2401  taaaagcata  gtgtataagt  gagtacactc  taattaactt  gcttctgttg  cactttagtt
2461  ttctacctgc  atatggactg  catttttttt  tttaacacag  tcagtatgta  gaatgggatg
2521  tattcttctg  ctgctgctta  ttaaataaag  aaagcctgag  tgttcttaga  tggggttatt
2581  ctgagatgag  ggtccttagcc  tacagtctct  tttgaaatga  aaggtgcttt  gtttttaatt
2641  tatattcatc  ttttcagggt  aaatttggtt  ttctgagttt  ctcgtaatgc  tcttttttac
2701  atgctgctac  tagctttttt  ttttaaaaaa  agtaaaagtt  gctgctttct  aaaatattaa
2761  ttgccttata  tttgaaagtg  ccattgcaat  cgtaagtaga  ctatgtattt  cctataatga
2821  tgtctgatat  ttaaataagga  aatcagacaa  acaatattca  gaaagttaa  gcataaaac
2881  tttttatttt  taacttgctt  agatccctgt  attccaaaac  ctgctgcctc  ataataaata
2941  tatctatata  tatttagcat  aagacgtgat  atttttaatt  tcttttttaa  aaaattatat
3001  ttgtctctta  gagttaaaat  tttctttata  taatattgtc  atatgtcata  gttttaatac
3061  aattcacatg  atttctatgt  ttcttaatga  tattttgttg  tgtaaaattg  atcggattga
3121  ttaaaaaaca  aattctctgg  aattgtgctg  ttcattgctt  ttcgtattct  ttatggcttt
3181  taaataaata  tacaatgggt  aatagt

```

FIGURE 4A

Predicted open reading frame:

MSGVVPTAPEQPAGEMENQTKPPDPRPDAPPEYSSHFLPGPPGTAVPPPTGYPGGLPMGY
YSPQQPSTFFLYQPVGGIHPVRYQPGKYPMPNQSVPITWMPGPTPMANCPPGLEYLVLQLD
NIHVLQHFEPLEMMTCFETNNRYDIKNNSDQMVYVVTEDTDDFTRNAYRTLRFVLRVTD
CMGREIMTMQRPFRCTCCCFCCPSARQELEVQCPPGVTIGFVAEHWNL CRAVYSIQNEKK
ENVMRVRGPCSTYGCSDSVFEVKSLDGISNIGSIIRKWNGLLSAMADADHFDIHFPLDL
DVKMKAMIFGACFLIDFMYFERSPPQRSR

FIGURE 4B

Mouse PLSCR1

```

1  gggcagagct  cgcgtcattc  agagtgagtc  ccctctgcga  gggaaagccg  ggctactgca
61  ggcgccaccag  caagggattg  ggactcacgg  acttcagaac  agaaggagcc  tcagaaactg
121  tttaaatcat  ggaaaaccac  agcaagcaaa  ctgaggctcc  ccaccgggga  acatatatgc
181  cagctgggta  tccccctccg  tatccaccag  cagctttcca  aggaccttca  gaccatgctg
241  cttaccccat  accccagget  ggctaccaag  ggcctccggg  cccctatcca  gggccccaac
301  ctggctaccc  agtcccacca  ggaggttatg  cagggtggtg  ccctagtggc  tttcctgtcc
361  aaaatcagcc  agcatataat  catccagggt  ggcctggggg  gaccccatgg  atgccagccc
421  cccctcctcc  actgaactgt  ccaccggggc  tggaaatact  agctcagatt  gatcagcttc
481  tggttcatca  gcaaattgag  cttctggaag  tcttaacagg  ctttgaaca  aataacaaat
541  atgaaatcaa  gaacagcctc  gggcagagag  tttactttgc  agtggaaagt  actgactgct
601  gtaccgaaa  ctgctgtggg  gcgtctagac  ctttcacctt  gaggatcctg  gataatctgg
661  gccgagaagt  catgactctg  gagagacctc  tgagatgcag  tagctgctgc  ttcccctgct
721  gcctccagga  gatagaaatc  caggctcctc  ctgggggtacc  agtaggttat  gtgactcaga
781  cctggcacc  atgtctgccc  aagtctactc  tccaaaatga  gaagaagcag  gatgtcctga
841  aagtagttgg  tccgtgtgtt  gtgtgtagct  gctgttccga  cattgacttt  gagctcaaat
901  ctctagatga  agaatcagta  gttggcaaaa  tttctaagca  gtggtctggt  tttgtgagag
961  aggccttcac  ggatgcagac  aattttggga  tccagttccc  gctagacctg  gatgtgaaga
1021  tgaaagctgt  gatgcttggg  gcttggttcc  tcatagattt  catgtttttt  gaaagaactg
1081  gaaacgagga  gcaaagatca  ggagcatggc  agtaactccc  tgagagttct  tgaggtttaa
1141  ggacgacaac  tttatggacc  ctgaatggaa  actgaggaat  cacaaggcac  acaccgtggc
1201  ttcttttctt  ttactgaaat  aactttctat  caactcacct  gtgatgacct  ggtgccctgt
1261  tgtacaatta  tgctcccaaa  ttagagttta  ttttttagaa  ttctgtcatg  tatttgtttt
1321  tatacattct  taaggttttc  actgtgaatt  tgggaaaaca  gttatgtgaa  tttatatata
1381  tagaaatgat  cttctctatg  aaaacatact  ttgactttgt  ctttcgtttc  ccatttttgt
1441  ggaaacgtaa  atgctattgt  aatttaatat  aaaattacac  attaaatata  attatgattt
1501  ac

```

Predicted open reading frame:

```

MENHSKQTEAPHPGTYPAGYPPYPAAAFQGPSDHAAYPI PQAGYQGPPGPYPGPQPGY
PVPPGGYAGGGPSGFPVQNQPAYNHPGGPGGTPWMPAPPPPLNCPGLEYLELAQIDQLLVH
QQIELLEVLTFETNNKYEIKNSLGQRVYFAVEDTDCCTRNCCGASRPFTLRILDNLGRE
VMTLERPLRCSSCCFPCCLQEIEIQAPPGVPVGYVTQTWHPCLPKFTLQNEKKQDVLKVV
GPCVVCSSCSDIDFELKSLDEESVVGKISKQWSGFVREAF TDADNFGIQFPLDLVDVKMKA
VMLGACFLIDFMFFERTGNEEQRSGAWQ

```

FIGURE 5

Mouse PLSCR2

```

1  tctaaagact caggaaacaa aacctaaatt gcctcaaagt tcaggtgctt tttctccctg
61  acttttagtct agtggagtag tgcagcacct atgcctttct gagaggagtc tggagagctg
121 agtcgctgct ggtgctagga ttctaggaat tcgcctcact tggagctgca tgagaaaaga
181 aaggcttgca aatggaggct cctcgctcag gaacatactt gccagctggg tatgccctc
241 agtatectcc agcagcagtc caaggacctc cagagcatac tggacgcccc acattccaga
301 ctaactacca agttccccag tctggttate caggacctca ggctagctac acagtctcaa
361 catctggaca tgaaggttat gctgctacac ggcttcctat tcaaaaataat cagactatag
421 tccttgcaaa cactcagtgg atgccagcac caccacctat tctgaactgc ccacctgggc
481 tagaatactt aaatcagata gatcagcttc tgattcatca gcaagttgaa cttctagaag
541 tcttaacagg ctttgaaaca aataacaaat ttgaaatcaa gaacagcctc gggcagatgg
601 tttatgttgc agtgggaagat actgactgct gtactcgaaa ttgctgtgaa gcgtctagac
661 ctttcacctt aagaatcctg gatcatctgg gccaaagaag catgactctg gagcgacctc
721 tgagatgcag tagctgctgc ttccctgct gcctccagga gatagaaatc caggctcctc
781 cgggggtgcc aatagggttat gtgactcaga cctggcacc cctgctgcc aagctcactc
841 ttcagaacga caagaggag aatgttctaa aagtagttgg tccatgtgtt gcatgcacct
901 gctgttcaga tattgacttt gagatcaagt ctcttgatga agtgactaga attggttaaga
961 tcaccaagca gtggtctggt tgtgtgaaag aggccttcac ggattcggat aactttggga
1021 tccaattccc gctagacctg gaggtgaaga tgaaagctgt gacgcttggg gcttgcttcc
1081 tcatagatta catgtttttt gaaggctgtg agtaggaaca gaaatccgac ctgcagtagg
1141 aatcaatgaa agaggacaga gaagatctga agtctacaca aggagatcat atgattgaga
1201 gacctggggc tttttgattt cttcattgaa atttctcaga atcaagctgt tatacatgaa
1261 gcatagtatg taacattttg gttttcaaat ggtagtttat cttttacatt attggaatag
1321 acctggataa ttatctttat acacttctaa aaatatgcac caaattcaag ttaaaaaaaaa
1381 aaagacgaag agaagtgtat gttttaaaat aaaacatttt atggaaaagt aagttaaatc
1441 ataattctggg atttattttt catcttttgt tcaatttaaa ccttgttagt gctgatttta
1501 ttataaaaatt gtacttttact atcaaacctg gttagtttat ttcttacaga aatcctccta
1561 ttatttttgaa attacatatt tttgaaagct ttttaaaaga tactattgcc tgggaaattc
1621 ta

```

Predicted open reading frame:

```

MEAPRSGTYLPAGYAPQYPPAAVQGPPEHTGRPTFQTNVQVPQSGYPGPQASYTVSTSGH
EGYAATRLPIQNNQTIIVLANTQWMPAPPPILNCPGLELYLNQIDQLLIHQQVELLEVLTG
FETNNKFEIKNSLGQMVYVAVEDTDCCTRNCCASRPFTLRILDLHGQEVMTLERPLRCS
SCCFPCCLQEIEIQAPPGVPIGYVTQTWHPCLPKLTLQNDKRENVLKVVGPCVACTCCSD
IDFEIKSLDEVTRIGKITKQWSGCVKEAFTSDSNFGIQFPLDLEVKMKAVTLGACFLIDY
MFEGCE

```

FIGURE 6

Mouse PLSCR3

```

1  cccccgagtct taggtgccgc cctagagacc ctggggcccg actggggcgca gctacctctt
61  cgcctctgcc tgctcgtctt tgtttctgtg tctgtctagc tgttcccgag cttgtcccac
121 tccagaacta agtctccctt acgccaaaag cccaagactc cctcctgat tcccatggca
181 ggctacttgc cccccaaagg ctatgccctt tcacccccac ctccctacce cgtgccatct
241 ggggtatccag agccgggtggc tctgcatcct ggaccgggac aagctccagt gccacccag
301 gtgcctgcc cgtctcccg cttcgtcttc tccccctcgc caggcccagt ggctccaggg
361 cctcctgctc ctttcgtgcc attgccaggg gtgcctcctg gctcgaatt cctagtgcag
421 attgatcaaa tcttgattca tcagaaggct gaacgagtgg aaacgttcct aggctgggag
481 acctgtaata tgtatgaact tcgctccgga accggacagc aactgggtca ggcagctgaa
541 gagagcaact gttgtgccc cctgtgctgt ggtgcccgcc gaccatttcg aatccgccta
601 gcggaacctg gggaccgcga ggtgctccgg ctccctccgc cacttcattg tggctgcagc
661 tgctgcccct gtggtcttca ggagatggaa gtccaggctc cacctggcac caccattggc
721 catgtgctac agacctggca tcccttcctt cctaagtttt ccctcctgga tgcctgatgc
781 caacctgttc tacgagttgt agggccttgc tggacttgtg gctgtggtac agacaccaac
841 tttgaggtga agactaagga tgaatcgca agtggtggcc gcatcagcaa gcagtgggga
901 gggctgctcc gagaagccct cacagatgcc gatgactttg gcctccaatt cccagtcgat
961 ctagatgtga aagtgaaggc cgtactgctg ggagccacgt tcctcatcga ttatatgttc
1021 ttcgagaaga gaggaggcgc aggacctct gccatcacca gttagaagcc acctcaggat
1081 gaggagacct atctccttga ccagaattta agatggtcag ctgcccctga cgttccctcc
1141 tgaagcaacc ctttccttga tatacactgc ggcgaccga cgagggtggc cgagtgggtg
1201 ggagccgttg tgtcccatcc cttccctgct tctcctgtgg cctgcagaa gagcatgtat
1261 gagacctgtt cctccttctg ttcaccatct ccaggcagt cctgtgcaca cattagcttt
1321 taaacttcct tgcacactcc ttcagcctt cctctggggc ctctgcatag gcaggggcat
1381 ctggaatcct ggactcaagt tttacccag ggcttgtggg taaaaggcaa gcagtaccaa
1441 agatggcaga caccacctt cccttatggc acttagcca attagtttag ctccgattg
1501 tggcactctg aggggatcct tgcctcctca ctaatagctg tagcggttgg gcccagtg
1561 caactcccta agcccctggg ccctgcgggt gctttctgca gctcctgtg cttatttaa
1621 ccgttaacct cttccttccc ctactgtagg aaggaggctg tgtctttgta tgtgtactc
1681 atataaactt tgaactttt taaacagt

```

Predicted open reading frame:

```

MAGYLPKGYAPSPPPYPVPSGYPEPVALHPGPGQAPVPTQVPAPAPGFALFPSGPVA
PGPPAPFVPLPGVPPGLEFLVQIDQILIHQKAERVETFLGWETCNMYELRSGTGQQLGQA
AEESNCCARLCCGARRPFRIRLADPGDREVLRLRLPLHCGSCCPCGLQEMEVQAPP GTT
IGHVLQTWHPFLPKFSILDADRPVLRVVGPCWTCGCGTD TNFEVKTDESRSVGRISKQ
WGGLLREALTDADDFGLQFPVDLDVKVKAVLLGATFLIDYMF FEKRGGAGPSAITS

```

FIGURE 7

Mouse PLSCR4 (partial sequence)

```

1  cagatgactt taccaggaat gcctatcgga acctacgacc ctttgtgctc cgggtcactg
61  actgcctggg ccgagagatc atgaccatgc agaggccttt ccgatgcacc tgctgttgct
121 tctgctgccc ctgtgcaaga caagagctgg aagtgcgaat tcctcctggg gtcaccattg
181 gctttgttgc agaacactgg aacttgtgca gagcctctta tagcatccag aatgagaaga
241 aagagagtat gatgagagtg aggggtccgt gtgcaacctc cggctgtggc tccgattctg
301 tttttgagat caactctcta gatggcgtgt ctaacatcgg cagtattata aggaagtgga
361 atggcctttt atcaacgatg gtaaatgctg accactttga gattcgcttc cctttggccc
421 tggatgtgaa gatgaaagca atgattttcg gctcttgctt cctcattgac ttcattgtact
481 ttgaacgacc tcctccgcga cgtatgtcaa gatagaggat caaacaatc atcaattgaa
541 aaaaaatgag taatttgcat tcagcttatg tatagetttc tgttattagc acatatattt
601 ctctggcttg acatgtgtct cagttgagta tttagcttct tgaggcacta ggttattctg
661 aaatctctac tccattagcc aaataaacat atacagatac aagcattaca gctataggca
721 tgtgagctat gggaaagtga aacccttggg tctcaacttg acaggtcaca acacatcttc
781 tgtncctgtc cctttcttct tcattaggaa aaacttgatt ccaggtgaga ggactgctac
841 tcttagtctt catctttagg agccaaaaag tgcacagaaa taatgtgctt taatgtgctc
901 agaaaatggt ttgtgtgtgt gtgtgtgtct gtgtgcacca gaacatcatt ctgcaacatg
961 catacaagtt cctaaagttc tcagtgggga attttatttt attacaaaat aaaatgtatt
1021 ctctttatag gcagtttata ttttctatgc atatttcttc ataccctcaa ctgggcaatg
1081 tggagctacc tgtatatgaa ggtaggatga gggtagcagg gaaagttgat cagagctaca
1141 gccaaataag ttcttggcat cttacacatg ttgtgtgttt gcttactcag caaaattagt
1201 gtggactctc gtattttacac ttgcctttta tctaactgtt tatactgatg tctggaatta
1261 cctattgtat ttttgtatct cacttgctat tttttttttt ttcgaaatcc atctaataac
1321 caggatgtcc ttgtgaccaa cagtttatta aagctgaata tgtaaatcct gtcattgctt
1381 taatactggg gacgctttgc gtggtaaaca actcattata tgcaatcagt aagaagacac
1441 agtaaatttg ttgcttccat attttctcca gattatcaat gaggactatg gaagaccagc
1501 agacttgtag taaggacagt gtatgtatga atcactgatt taattaatga gtttcatgcc
1561 tttgctgtcg acctacacat agatgctgta tgggtttttt ttttaatgga tatattctct
1621 tanagtttat ttaaaaagga ttaagtgtc ttgggttgaa ttatcctgag agaagagatg
1681 tagccaacag gcctttttga aatagcaggn gcttcagctt taattatact aatgttttta
1741 tgagaaagat tgttctcttc agttatctac ttgctgctgt tgagttttta tttaaaaaaa
1801 atcatgagtt cttgactaaa aactacctta aatgttaaaa tgtacctcta attttaacca
1861 gacatacatg atttctgtat gacatcttgt attttgcata taaaccagat aaacagaatt
1921 ctgagagctc acgtataagc ctgtcctttg cccaccacca cccattctta gcactttgca
1981 tcacgttgat agtgaaagtc agaatgcttc atatttctgt gctccatact tcagtgttca
2041 tgatgctaat acttctctaa cagcagaatt ctttaacata agtcatgcaa tttctgtaac
2101 gcagtagaat ttcactgtat caagacagcc tacttaacta aaaaataaac aacttgtttt
2161 ct

```

Predicted open reading frame (partial, 5' end missing):

```

DDFTRNAYRNLRPFVLRVTDCLGREIMTMQRPFRCTCCCFCCPCARQELEVQCPPGVITG
FVAEHWNLCRASYSIQNEKKESMMRVRGPCATYGCSDSVFEINSLDGVSNIGSIIRKWN
GFLSTMVNADHFEIRFPLALDVKMKAMIFGSCFLIDFMYFERPPPRMSR

```

FIGURE 8

PLSCR1	1	.....MD	KQNSQMNASH	PETNLPVGY	PQY	PPTAFQG	PPGY	SGYPGP
PLSCR2	1	.....	.....	.....	.....	.....	.....	.....
PLSCR3	1	.....	.....MAGYL	PPKGYAPSE	PPY	PVT..PG	YPEPALHPG.	
PLSCR4	1	MSGVVPTAPE	QPAGEMENQT	KPPDPRPDAP	PEY	SSHFLPG	PPGTAVPPPT	
PLSCR1	43	QVSYPPPPAG	HSGPGPAGFP	VPN.....QP	VYNQP.	VYNQ	PVGAAGVPWM	
PLSCR2	1	.....	.....	.....	.....	.....	.....M	
PLSCR3	28	..PGQAPVPA	QVPAPAPGFA	LF.....	.....	PSPGPV	ALGSAA.PFL	
PLSCR4	51	GYPGGLPMGY	YSPQQPSTFP	LYQPVGGIHP	VRYQPGKYPM	PNQSV	PITWM	
PLSCR1	87	PAPQPPLNCP	PGLEYLSQID	QILIHQQIEL	LEVLTGFETN	NKYEIKNSFG		
PLSCR2	2	PAPPPPLNCP	PGLEYLSQID	MILIHQQIEL	LEVLSFESS	NMYEIKNSFG		
PLSCR3	64	PLP....GVP	SGLEFLVQID	QILIHQKAER	VETFLGWETC	NRYELRSGAG		
PLSCR4	101	PGPTFMANCP	PGLEYLVQLD	NIHVLQHFEP	LEMMTCFETN	NRYDIKNNSD		
PLSCR1	137	QRVYFAAEDT	DCCTRNCCGP	SRPFTLRIID	NMQQEVITLE	RPLRCSSCC.		
PLSCR2	52	QRIYFAAEDT	NFCIRNCCGR	SRPFTLRITD	NVGREVITLE	RPLRCNCCC.		
PLSCR3	114	QPLGQAAEES	NCCARLCCGA	RRPLRVRLAD	PGDREVLRL	RPLHCGCSC.		
PLSCR4	151	QMVYVVTEDT	DDFTRNAYRT	LRPFVLRVTD	CMGREIMTMQ	RPFRCCTCCCF		
PLSCR1	185	.CPCCLQEIE	IQAPPGVPIG	YVIQTWHPCL	PKFTIQNEKR	EDVLKISGPC		
PLSCR2	100	.CPCCLQEIE	IQAPPGVPVG	YVTQTWHPCL	TKFTIKNQKR	EDVLKISGPC		
PLSCR3	162	.CPCGLQEME	VQAPP GTTIG	HVLQTWHPFL	PKFSIQDADR	QTVLRVVGPC		
PLSCR4	201	CCPSARQELE	VQCPPGV TIG	FVAEHWNL CR	AVYSIQNEKK	ENVMRVRGPC		
PLSCR1	235	VVCSCCGDVD	FEIKSLDEQC	VVGKISKHWT	GILREAF	DA	DNFGIQFPLD	
PLSCR2	150	IVCSCIAGVD	FEITSLDEQI	VVGRISKHWS	GFLREAF	DA	DNFGIQFPRD	
PLSCR3	212	WTCGCGTDTN	FEVKTRDES	SVGRISKQWG	GLVREAL	DA	DDFGLQFPLD	
PLSCR4	251	STYGCGSDSV	FEVKS LDGIS	NIGSIIRKWN	GLL.SAM	DA	DHFDIHFPLD	
PLSCR1	285	LDVKMKAVMI	GACFLIDFMF	FESTGSQEQK	SGVW	318		
PLSCR2	200	LDVKMKAVMI	GACFLIDYMF	FERTR.....	.....	224		
PLSCR3	262	LDVRVKAVLL	GATFLIDYMF	FEKRGAGPS	AIT	295		
PLSCR4	301	LDVKMKAMIF	GACFLIDFMY	FERSPPORSR	.....	330		

FIGURE 9

MU PLSCR1 328 aa; HU PLSCR1 318 aa

	10	20	30	40	50	60
Mouse	MENHSKQTEAPHPGTYPAGY	PPYP	PAAFGQPSDHAAYPI	QAGYQGGPPGYP	PGPQPGY	
Human	MDKQNSQMNASHPETNLPVGY	PPQY	PPTAFQGP	-----P--GYSG--	YPGPQVSY	
	10	20	30		40	

	70	80	90	100	110
Mouse	PVPPGGYAGGGPSGFPVQNQPAYNHPG	-----GPGGT	PWMPAPPPPLNCPPGLE	YLAQID	
Human	PPPPAGHSGPGPAGFPVFNQPVYNQPVGAAGVFWMPAPQFPPLNCPPGLE	YLSQID			
	50	60	70	80	90

	120	130	140	150	160	170
Mouse	QLLVHQQIELLEVLTGFETNNKYEIKNSLGQRVYFAVEDTDCCTRNCCGASRPFTLRILD					
Human	QILIHQQIELLEVLTGFETNNKYEIKNSFGQRVYFAAEDTDCCTRNCCGPSRPFTLRIID					
	110	120	130	140	150	160

	180	190	200	210	220	230
Mouse	NLGREVMTLERPLRCSSCCFPCCLQEIEIQAPPGVPVGYVTQTWHPCLPKFTLQNEKKQD					
Human	NMGQEVITLERPLRCSSCCCPCLQEIEIQAPPGVPIGYVTQTWHPCLPKFTIQNEKRED					
	170	180	190	200	210	220

	240	250	260	270	280	290
Mouse	VLKVVGPCVVCSCCSDIDFELKSLDEESVVGKISKQWSGFVREAF	TADNFGIQFPLDLD				
Human	VLKISGPCVVCSCCGDVFDFEIKSLDEQCVVGKISKHWTGILREAF	TADNFGIQFPLDLD				
	230	240	250	260	270	280

	300	310	320
Mouse	VKMHAVMLGACFLIDFMFFERTGNEEQRSGAWQ		
Human	VKMHAVMIGACFLIDFMFFESTGSQEQKSGVW		
	290	300	310

FIGURE 10

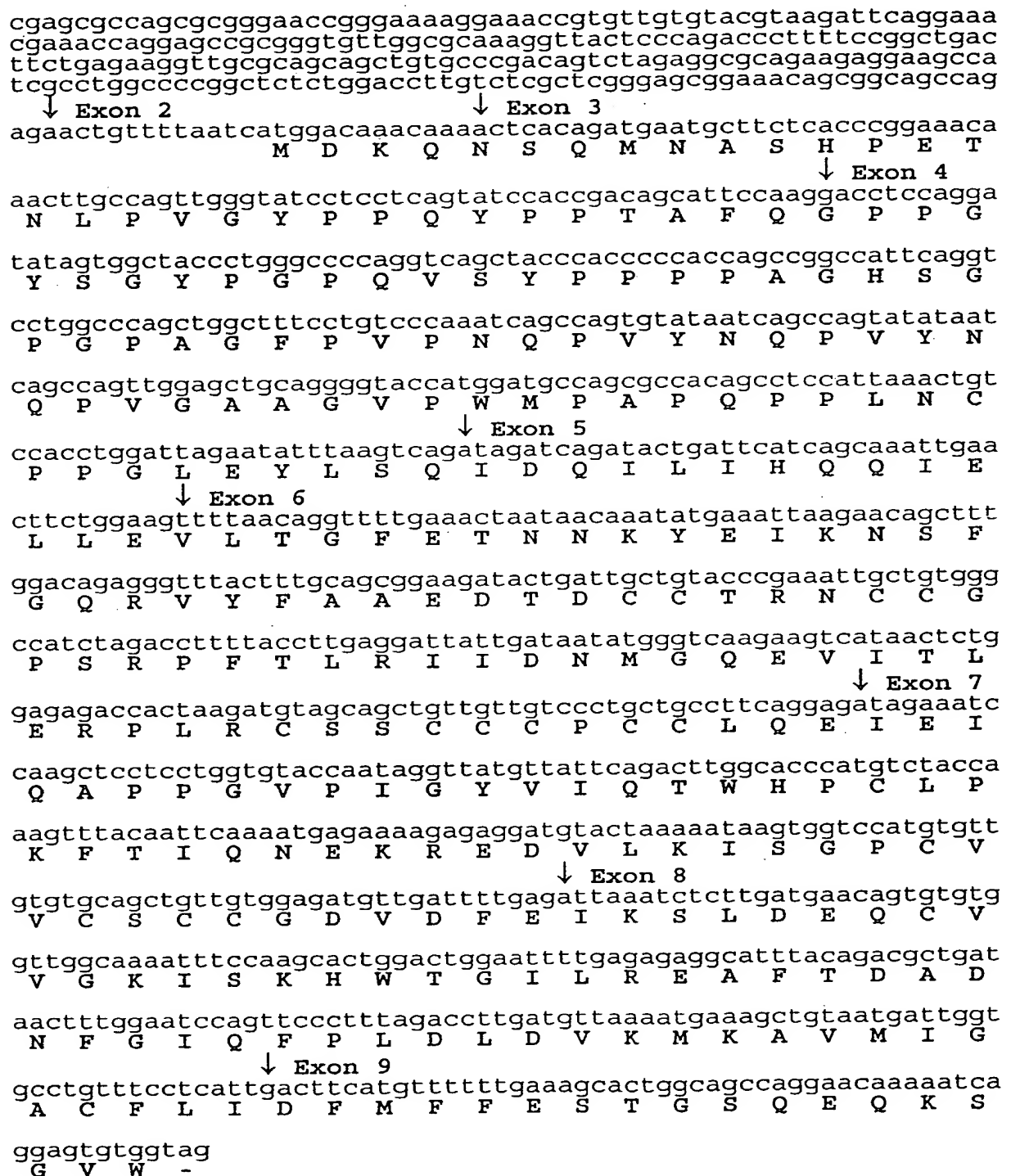


FIGURE 11

-150	AGTTTCCTCTCCTTAACCACCGGACAAACGTCTCTGGAGTCTCTCCAATG	-101
	CCAAT box	
-100	AGCAAGAAAGCAAGTCGGGGGTAGGGGAGGGGCCTCACACCAGGGGGTGG	-51
	GC box GC box	
-50	GCGCAGTCCCTCCTCCAGCTCCTTCACCCTCCAGTAGTCTCGTGGGTCCC	-1
	AP4 USF	
+1	CGAGCGCCAGCGCGGGAACCGGGAAAAGGAAACCGTGTGTGTACGTAAG	+50
	AP4 ETS1 ISRE; IRF	
+51	ATTCAGGAAA	

FIGURE 12

[illegible]

FIGURE 13